CLAIMS

1. A compound represented by formula I:

$$\mathbb{R}^{2}$$
 \mathbb{R}^{3} \mathbb{Q} \mathbb{Q} \mathbb{R}^{4} \mathbb{Q}

wherein

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 R^1 is selected from the group consisting of H, halogen, (C_{1-4}) alkyl, $O(C_{1-6})$ alkyl, and haloalkyl;

10 \mathbf{R}_2 is H or (C_{1-4}) alkyl;

 \mathbb{R}^3 is H or (C_{1-4}) alkyl;

 \mathbf{R}^4 is (C_{1-4}) alkyl, (C_{1-4}) alkyl (C_{3-7}) cycloalkyl, or (C_{3-7}) cycloalkyl; and

Q is a fused phenyl-5 or 6-membered saturated heterocycle having one to two heteroatoms selected from O and N, said **Q** is selected from the group consisting of:

a) wherein one of **E** and **G** is C(O) and the other is N**R**⁵

wherein R^5 is selected from the group consisting of H, hydroxy and (C_{1-4}) alkyl unsubstituted or substituted with pyridinylmethyl, (pyridinyl-N-oxide)methyl or $C(O)OR^6$ wherein R^6 is H or (C_{1-4}) alkyl; and each R^7 is independently H, Me or Et; or

b) wherein **E** is NR⁸ wherein R⁸ is H, (C₁₋₄)alkyl unsubstituted or

25 substituted with C(O)OR⁹ wherein R⁹ is H or (C₁₋₄)alkyl; or

wherein D and G are NR¹⁰ wherein each R¹⁰ is independently H or (C₁₋₄)alkyl unsubstituted or substituted with C(O)OR¹¹ wherein

R¹¹ is H or (C₁₋₄)alkyl; or

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c)

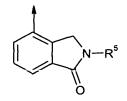
wherein one of L, M, Y and Z is NR¹² wherein R¹² is H, d) (C_{1-4}) alkyl unsubstituted or substituted with $C(O)OR^{12x}$ wherein R^{12x} is H or (C_{1-4}) alkyl; one of the remaining positions of L, M, Y and Z adjoining the NR¹² is C(O); and the remaining two positions are each CR¹³R¹³ wherein each R¹³ is independently H, Me or Et; or

wherein three adjoining positions of L, M, Y and Z (namely e) **L-M-Y** or **M-Y-Z**) represent NR^{14} -C(O)-O- or $-NR^{15}$ -C(O)- NR^{16} — wherein R^{14} , R^{15} and R¹⁶ each represents H or (C₁₋₄)alkyl unsubstituted or substituted with C(O)OR¹⁷ wherein R¹⁷ is H or (C₁⊿)alkvl; and the remaining position of L, or Z is CR¹⁸R¹⁸ wherein each R¹⁸ is H, Me or Et;

or a pharmaceutically acceptable salt, or prodrug thereof.

20 2. The compound according to claim 1, wherein R¹ is selected from: H, Cl, F, $(C_{1,4})$ alkyl and CF_3 ; \mathbb{R}^2 and \mathbb{R}^3 is each independently H or Me; \mathbb{R}^4 is ethyl or cyclopropyl; and

Q is selected from:



wherein R⁵ is H, hydroxy, CH₃ or (4-

25 pyridinyl)methyl;

$$N-Me$$
 $N-CMe_3$
 $N-CMe_3$

H, Me or CH₂C(O)OH,

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5 or **Q** is further selected from:

$$R^{18}$$
 R^{18} R

Me or $CH_2C(O)OH$ and each \mathbf{R}^{18} is independently H or Me. More preferably, \mathbf{R}^{14} is H or $CH_2C(O)OH$ and each \mathbf{R}^{18} is H,

or
$$\bigwedge_{R^{16}}^{R^{15}} \text{ or } \bigvee_{R^{16}}^{R^{15}} \text{ or } \bigvee_{R^{16}}^{R^{15}} \text{ or } \bigvee_{R^{16}}^{R^{15}} \text{ wherein } \mathbf{R}^{15} \text{ is H, Me or } \mathbf{CH}_2\mathbf{C}(\mathbf{O})\mathbf{OH}$$

and \mathbf{R}^{16} is H, Me or CH₂C(O)OH. More preferably, \mathbf{R}^{15} is H or CH₃ and \mathbf{R}^{16} is H, CH₃ or CH₂ C(O)OH.

3. The compound according to claim 2, wherein \mathbb{R}^1 is H, Cl, F or Me; \mathbb{R}^2 is H; \mathbb{R}^3 is Me; \mathbb{R}^4 is ethyl; and \mathbb{Q} is selected from:

wherein **R**⁵ is H, hydroxy or (4-pyridinyl)methyl;

CH₂C(O)OH and each R¹⁸ is H,

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wherein R^{15} is H or CH_3 and R^{16} is H,

wherein R¹⁴ is H or

CH₃ or CH₂ C(O)OH.

4. The compound according to claim 3, wherein **Q** is selected from:

The compound according to claim 4, wherein R¹ is H, R² is H, R³ is Me, R⁴ is 5. ethyl and Q is selected from:

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6. A pharmaceutical composition for the treatment or prevention of HIV infection, comprising a compound of formula I according to claim 1, or a pharmaceutically acceptable salt, or prodrug thereof, and a pharmaceutically acceptable carrier.

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- A method for the treatment or prevention of HIV infection, comprising 7. administering to a patient an HIV inhibiting amount of a compound of formula I according to claim 1, or a pharmaceutically acceptable salt, or prodrug thereof.
- A method for the treatment or prevention of HIV infection, comprising 8. administering to a patient an HIV inhibiting amount of a pharmaceutical composition, according to claim 6.

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9. A method for treating or preventing HIV infection comprising administering a compound of formula I according to claim 1, in combination with an antiretroviral drug.

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A method for preventing perinatal transmission of HIV11 from mother to baby, comprising administering a compound of formula I according to claim 1, to the mother before giving birth.

- 11. Use of a compound of formula I according to claim 1, for the manufacture of a medicament for the treatment or prevention of HIV infection in a human.
- **12.** A process for producing a compound of formula I according to claim 1, comprising steps of:
- coupling a compound of formula 2:

wherein R1, R2, R3 and R4 are as defined in claim 1;

10 with a phenolic derivative selected from:

wherein one of **E** and **G** is C(O) and the other is NR^{5A} wherein R^{5A} is a N-protecting group, hydroxy or (C_{1-4}) alkyl unsubstituted or substituted with pyridylmethyl, (pyridinyl-N-oxide) methyl or C(O)OR^{6A} wherein R^{6A} is a carboxy protecting group or (C_{1-4}) alkyl; and each R^7 is independently H, Me or Et.

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b) wherein **E** is NR^{8A} wherein R^{8A} is a N-protecting group, (C_{1-4}) alkyl unsubstituted or substituted with $C(O)OR^{9A}$ wherein R^{9A} is a carboxy protecting group or (C_{1-4}) alkyl; or

c) wherein **D** and **G** each independently is NR^{10A} wherein

R^{10A} is a N-protecting group or (C₁₋₄)alkyl unsubstituted or substituted with C(O)OR^{11A} wherein \mathbb{R}^{11A} is a carboxy protecting group or (C₁₋₄)alkyl;

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wherein one of **L**, **M**, **Y** and **Z** is NR^{12A} wherein NR^{12A} is a N-protecting group, (C_{1-4}) alkyl unsubstituted or substituted with $C(O)OR^{12y}$ wherein R^{12y} is a carboxy protecting group or (C_{1-4}) alkyl; one of the remaining positions of **L**, **M**, **Y** and **Z** adjoining the NR^{12A} is C(O); and the remaining two positions are each $CR^{13}R^{13}$ wherein each R^{13} is independently H, Me or Et; or

e) wherein three adjoining positions of **L**, **M**, **Y** and **Z** (namely **L-M-Y** or **M-Y-Z**) represent -NR¹⁴-C(O)-O- or -NR¹⁵-C(O)- NR¹⁶- wherein R¹⁴, R¹⁵ and R¹⁶ are as defined in claim 1, and the remaining position of **L** or **Z** is CR¹⁸R¹⁸ wherein each R¹⁸ is as defined in claim 1; and, if required,

- removing any protective groups in a mixture of aqueous base or aqueous acid in a co-solvent, to obtain the corresponding compound of formula I.
- 13. The process according to claim 12, wherein said N-protecting group is selected from the group consisting of: alkyl esters; aralkyl esters; and esters that can be cleaved by mild base treatment or mild reductive means.
- The process according to claim 12, wherein said carboxy-protecting group is
 selected from the group consisting of: Boc (*tert*-butyloxycarbonyl) and alkyl carbamates.
- 15. A pharmaceutical preparation for use in the treatment or prevention of HIV infection, wherein the active ingredient is a compound of formula 1 according to claim 1, or a pharmaceutically acceptable salt, ester or prodrug thereof.